

WHAT IS CLAIMED IS:

1. A method of arranging data in a database comprising:
creating a first table adapted for storing the data and having one row for each data entry; and
creating a second table adapted for storing data components and having one row for each component of the data.
2. The method as claimed in claim 1, wherein the data is a structured data type.
3. The method as claimed in claim 1, wherein the data is a string data type.
4. The method as claimed in claim 1, wherein the data is or represents a X.509 certificate.
5. The method as claimed in claim 1, wherein the component of the data is a checksum or fingerprint.
6. The method as claimed in claim 1, where the database is a part of an electronic directory services system.
7. The method as claimed in claim 6, where the electronic directory services system comprises an X.500 and LDAP services system.

8. A database having a data storage arrangement comprising:
a search table containing at least one row having a plurality of columns;
and
a subsearch table containing at least one row having a plurality of columns
including a component identifier column.

9. The database as claimed in claim 8, wherein the columns of the search table are in the form "EID, AID, VID, Norm", where EID identifies an object to which a value belongs, AID identifies an attribute type of the value, and VID identifies one of a possible number of attribute values in the one entry.

10. The database as claimed in claim 8, wherein the columns of the search table are in the form "EID, AID, VID, CID, Norm", where EID identifies an object to which a value belongs, AID identifies an attribute type of the value, VID identifies one of a possible number of attribute values in the one entry, and CID identifies the component identifier.

11. The database as claimed in claim 8, further comprising a subattribute table containing at least one row having a plurality of columns in which a description or reference to the subsearch table is provided.

12. The database as claimed in claim 11, wherein the columns of the subattribute table are in the form "CID, SYN, DESC, OBJECT ID, FLAGS".

13. A database having a data storage arrangement comprising:

a first table directed to a hierarchy which defines a relationship between objects and configured to have one row per object, a second table directed to objects which define one or more values within each object and configured to have one row per value, and a third table directed to one or more selected components of values and configured to have one row for each component of each value.

14. A directory services system for performing directory service requests on a database, comprising:

a first table arranged for storing data, the first table having one row for each data entry; and

a second table arranged for storing data components, the second table having one row for each component of the data.

15. A directory services system as claimed in claim 14, wherein the data is a structured data type.

16. A directory services system as claimed in claim 14, wherein the data is a string data type.

17. The directory services system of claim 14, being an X.500 or LDAP directory services system.

18. A directory services system having a data storage arrangement comprising:

a first table directed to a hierarchy which defines a relationship between objects and configured to have one row per object, a second table directed to objects which define one or more values within each object and configured to have one row per value, and a third table directed to one or more selected components of values and configured to have one row for each component of each value.

19. A directory services system as claimed in claim 18, wherein the data is a structured data type.

20. A directory services system as claimed in claim 18, wherein the data is a string data type.

21. The directory services system of claim 18, being an X.500 or LDAP directory services system.

22. A method of searching a database for given data entries, the database having a first table adapted for storing the data and having one row for each entry, and a second table adapted for storing data components and having one row for each component of the data, the method comprising:

determining a component of a given data entry;

executing one of an exact or initial matching on the second table in order to locate the component; and

returning the given data entry matching the component located.

23. The method as claimed in claim 22, where the database is a part of an electronic directory services system.

24. The method as claimed in claim 22, where the electronic directory services system comprises an X.500 and LDAP services system.

25. The method as claimed in claim 22, wherein the data is or represents a X.509 certificate, and / or a check sum of the data and / or a fingerprint of the data.

26. The method as claimed in claim 23, wherein the component is a checksum or fingerprint of the data.

27. The method as claimed in claim 26, wherein the search is conducted using a search table to locate the fingerprint or checksum.

28. A method as claimed in claim 27, further wherein components of the checksum or fingerprint are searched.